a control interface coupled to said coder/decoder;

- a data interface coupled to said coder/decoder; and
- a graphic interface coupled to said coder/decoder for receiving said data from said coder/decoder and for displaying a plurality of trader metaphors representative of actual traders, said trader metaphors simulating one or more body movements of traders in an open outcry trading environment, wherein the movement of at least one of said trader metaphors is responsive to and synchronized with an actual trader's movements.
- 39. (Amended) The virtual trading floor system of Claim 38, wherein said at least one of said trader metaphors visually faces the remaining ones of said trader metaphors.

40. (Amended) A method of trading using a virtual trading floor system, comprising the steps of:

generating data;

receiving said data; and

displaying said data in the form of a plurality of trader metaphors representative of actual traders, said trader metaphors simulating one or more body movements of traders in an open outcry trading environment.

REMARKS

Claims 17, 19 and 36 have been cancelled. Claims 1-16, 18, 20-35 and 37-40 have been amended for clarity. Applicants wish to thank Examiner Fults for his time and suggestions regarding the pending claims. The present amendment incorporates the suggestions made by the Examiner in telephone conference calls between Examiner Fults, and the undersigned on May 9, May 13 and May 14, 2002.

CONCLUSION

Applicant respectfully requests that the foregoing amendment be entered and that the pending amended claims be considered and allowed to issue. The Examiner is encouraged to contact the undersigned directly at (312) 984-7679 should there be any issues that might hinder passage of this application to issue.

Respectfully submitted,

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Appendix A

Marked-up Copy of Amended Claims 1-16, 18, 20-35 and 37-40 for App. No. 09/540,601

- 1. (Amended) A <u>virtual trading floor system</u> [trading simulator], comprising: a coder/decoder that receives and transmits data;
- a graphic interface coupled to said coder/decoder, that receives and displays certain of said data transmitted from said coder/decoder as a plurality of [buying and selling] trader metaphors representative of actual [buying and selling] traders;

said trader metaphors simulating one or more body movements of traders in an open outcry trading environment:

- a control interface coupled to said coder/decoder for initiating orders related to said data received and transmitted by said coder/decoder; and
- a data interface coupled to said coder/decoder for displaying said data in a non-graphic, human-readable form, and for receiving and transmitting data to and from said coder/decoder.
- 2. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein said coder/decoder receives said data from a trading source.
- 3. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein said graphic interface, said control interface and said data interface comprise a single interface.
- 4. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein <u>said trader metaphors include</u> [each said actual buying trader is represented by] a human metaphor having a hand up and facing in toward said human metaphor <u>to represent an actual buying trader</u>.

- 5. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein <u>said trader metaphors include</u> [each said actual selling trader is represented by] a human metaphor having a hand up that is facing out and away from said human metaphor <u>to represent</u> an actual <u>selling trader</u>.
- 6. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein <u>said trader metaphors include a plurality of buying trader metaphors and</u> a particular one of said plurality of buying trader metaphors is positioned visually forward or is characterized by a larger metaphor than the remaining said plurality of buying trader metaphors, and is representative of one of said actual [buying] traders having the highest bid price for a security.
- 7. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein <u>said trader metaphors include a plurality of selling trade metaphors</u> and a particular one of said plurality of selling trader metaphors is positioned visually forward or is characterized by a larger metaphor than the remaining said plurality of selling trader metaphors, and is representative of one of said actual [selling] traders having the lowest offer price for a security.
- 8. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein each of said [plurality of buying and selling] trader metaphors has an associated visual price designation and an associated visual quantity designation.
- 9. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein said <u>trader metaphors include a plurality</u> of selling trader metaphors [are] arranged in rows based on the offer price of each said selling trader <u>metaphor</u>, such that any selling trader <u>metaphor</u> in a first row will have an associated offer price that is below that of any selling trader <u>metaphor</u> in a second row which is behind said first row, and such that said plurality of selling

trader metaphors are arranged within each row in order of offer price.

- 10. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein said <u>trader metaphors include a plurality</u> of buying trader metaphors [are] arranged in rows based on the bid price of each said buying trader, such that any buying trader <u>metaphor</u> in a first row will have an associated bid price that is above that of any buying trader <u>metaphor</u> in a second row which is behind said first row, and such that said plurality of buying trader metaphors are arranged within each row in order of bid price.
- 11. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein said <u>trader metaphors include a plurality</u> of selling trader metaphors [are] represented by a first color, and <u>a [wherein said]</u> plurality of buying trader metaphors [are] represented by a second color.
- 12. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein <u>said trader metaphors include a plurality of selling trader metaphors and a plurality of buying trader metaphors and a given one of said plurality of selling trader metaphors representative of a best offer price is adjacent to a given one of said plurality of buying trader metaphors representative of a best bid price.</u>
- 13. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means for providing price and quantity designations associated with a particular [buying or selling] trader <u>metaphor</u>.
- 14. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein a particular one of said [plurality of buying] trader metaphors is representative of a plurality of said actual [buying] traders each having the highest bid price for a security.

- 15. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein a particular one of said [plurality of selling] trader metaphors is representative of a plurality of actual [selling] traders each having the lowest offer price for a security.
- 16. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein a particular one of said [plurality of buying] trader metaphors is representative of a plurality of said actual [buying] traders.
- 18. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein a particular one of said [plurality of buying] trader metaphors is representative of a plurality of said actual [buying] traders and has an associated visual price designation and an associated visual quantity designation.
- 20. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, wherein the number of said [plurality of buying and selling] trader metaphors changes correspondingly to said number of said actual [buying and selling] traders trading in a particular security.
- 21. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means whose volume fluctuates <u>based on the</u> [correspondingly to said] number of [said] actual buying or selling traders trading in a particular security.
- 22. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means whose volume fluctuates <u>based on the</u> [correspondingly to said] number of [said] actual buying or selling traders trading in a particular market.

- 23. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means from which the audio fluctuates <u>based on the</u> [correspondingly to said] number of [said] actual buying or selling traders trading in a plurality of markets.
- 24. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means for providing the confirmation of a trade between a particular [one of said] actual buying [traders] <u>trader</u> and a particular [one of said] actual selling [traders] <u>trader</u>.
- 25. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means from which the audio fluctuates <u>based on</u> [correspondingly with] the volume of trading in a particular security.
- 26. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means from which the audio fluctuates <u>based on</u> [correspondingly with] the volume of trading in a particular market.
- 27. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising an auditory means from which the audio fluctuates <u>based on</u> [correspondingly with] the volume of trading in a plurality of markets.
- 28. (Amended) The <u>virtual trading floor system</u> [trading simulator] of Claim 1, further comprising a quote board displayed with said plurality of [buying and selling] trader metaphors.

- The virtual trading floor system [trading simulator] of Claim 1, (Amended) 29. wherein said [plurality of buying and selling] trader metaphors are representative of actual [selling and buying] traders in different markets, and are displayed on different segments of a given display.
- The virtual trading floor system [trading simulator] of Claim 29, 30. (Amended) wherein a trader may place orders in a given market of said different markets that has been designated as active.
- The virtual trading floor system [trading simulator] of Claim 1, (Amended) 31. further comprising a displayed quote board containing information from one or more different markets.
- The virtual trading floor system [trading simulator] of Claim 31, 32. (Amended) wherein a trader may place orders in a given market of said different markets that is visually designated as active in said quote board, and where said plurality of [buying and selling] trader metaphors are representative of activity in said given market.
- The virtual trading floor system [trading simulator] of Claim 31, (Amended) 33. wherein a trader may place orders in a given market of said different markets that is visually designated as active in said quote board, and where said [plurality of buying and selling] trader metaphors are representative of activity in a different market.
 - A virtual trading floor system [trading simulator], comprising: 34. (Amended) a source that provides data; and
- a graphic [graphical] interface that receives said data and displays a plurality of [buying and selling] trader metaphors representative of actual [buying and selling] traders;

said trader metaphors simulating one or more body movements of traders in an open outcry trading environment.

- 35. (Amended) A virtual trading floor system [trading simulator], comprising:
- a source that generates data;
- a coder/decoder coupled to said source, said coder/decoder receiving said data from said source; and
- a graphic [graphical] interface that receives said data from said coder/decoder and displays a plurality of buying and selling trader metaphors representative of actual buying and selling traders;

said trader metaphors simulating one or more body movements of traders in an open outcry trading environment.

- 37. (Amended) A virtual trading floor system [trading simulator], comprising:
- a coder/decoder that transmits and receives data;
- a control interface coupled to said coder/decoder;
- a data interface coupled to said coder/decoder; and
- a graphic [graphical] interface coupled to said coder/decoder for receiving said data from said coder/decoder and for displaying a plurality of [buying and selling] trader metaphors representative of actual [buying and selling] traders, said trader metaphors simulating one or more body movements of traders in an open outcry trading environment, wherein the movement of at least one of said [buying and selling] trader metaphors is responsive to and synchronized with an actual trader's movements.
 - 38. (Amended) A virtual trading floor system [trading simulator], comprising:
 - a source that generates data;
 - a coder/decoder coupled to said source;
 - a control interface coupled to said coder/decoder;
 - a data interface coupled to said coder/decoder; and
- a graphic [graphical] interface coupled to said coder/decoder for receiving said data from said coder/decoder and for displaying a plurality of [buying and selling] trader metaphors representative of actual [buying and selling] traders, said trader metaphors simulating one or more body movements of traders in an open outcry trading environment, wherein the movement

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of at least one of said [buying and selling] trader metaphors is responsive to and synchronized with an actual trader's movements.

- 39. The virtual trading floor system [trading simulator] of Claim 38, (Amended) wherein said at least one of said [buying and selling] trader metaphors visually faces the remaining ones of said [buying and selling] trader metaphors.
- 40. A method of trading using a virtual trading floor system [trading (Amended) simulator], comprising the steps of:

generating data;

receiving said data; and

displaying said data in the form of a plurality of [buying and selling] trader metaphors representative of actual [buying and selling] traders, said trader metaphors simulating one or more body movements of traders in an open outcry trading environment.